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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,851	08/15/2001	Ivan Wong	SUNMP011	2121

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EXAMINER

CAO, DIEM K

ART UNIT PAPER NUMBER

2194

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/930,851

Applicant(s)

WONG ET AL.

Examiner

Diem K. Cao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-19 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sun (Java Media Framework API Guide) in view of Mathur et al. (U.S. 2005/0066340 A1).**

4. As to claim 1, Sun teaches a multimedia framework application program interface (The JMF API consists mainly of interfaces; page 3, section Managers) consisting of a playback interface (a player; pages 1-2 and page 11, section Players), a control interface (the controls interface; page 7, section Controls), an event listener interface (listener interface; page 4, section Event Model), and an events interface (JMF uses a structured event reporting mechanism ... types of events; page 4, section Event Model). Although Sun does not explicitly teach an error list interface, an exception interface, and a protocol handler interface, Sun teaches there are multiple protocols (HTTP protocol, FILE protocol, Real-time Transport protocol, MediaBase protocol; page 5, section Push and Pull Data Sources), multiple error types (NotRealizedError, NotPrefetchedError, NotConfiguredError; page 18), and multiple exception types (ClockStoppedException; page 18) are supported by the framework. Sun further teaches the

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framework comprising a set of interfaces (The JMF API consists mainly of interfaces; page 3, section Managers). It would have been obvious, an error list interface, an exception interface and a protocol handler interface are existed in the framework.

5. However, Sun does not teach the multimedia framework application program interface capable of operation in mobile hardware devices, and the memory size of the mobile multimedia framework API is less than 100 kilobytes. Mathur teaches a modified operating system is created to be used in an embedded systems with limited constrain memory (the kernel module 214 ... 4GB address space; page 4, paragraphs 62-63), wherein a modified API for the modified operating system is also created which included only a selected set of API that is needed for certain environment (page 2, paragraphs 15-18 and APIs in a Resource Limited System; page 6, paragraphs 102-103). Although both Sun and Mathur does not teach the framework API is less than 100 kilobytes, providing small API for the small operating system is well known and applied in the art. For example, Friedrich teaches operating system for embedded system is range from 20-26 kbytes (page 36).

6. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Sun and Keeley because the system of Mathur to provides method to reduce the size of the software/framework to work in a constraint memory systems.

7. As to claim 2, Sun teaches the playback interface is a top-level entry point to the API for an application (the player provides processing and control mechanisms similar to a VCR; page 2,

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first paragraph and A Player generally provides two standard user interface components; page 14, sections Presentation Controls and Standard User Interface Components).

8. As to claim 3, Sun teaches the playback interface further defines start and stop playback functionality (Player methods such as start and stop; page 9, section User Interface Components).

9. As to claim 4, Sun teaches the control interface defines advance playback functions (Caching control ... displayed to the user and GainControl enables audio volume adjustments ... volume changes; page 7, section Standard Controls).

10. As to claim 5, Sun teaches the event listener interface defines objects to receive update events from players (For each type of JMF object that can post MediaEvent ... its addListener method; page 4, section EventModel).

11. As to claim 6, Sun teaches the error list interface defines error classes for the API (NotRealizedError, NotPrefetchedError, NotConfiguredError; page 18).

12. As to claim 7, Sun teaches the exception interface defines exception classes for the API (ClockStoppedException; page 18).

13. As to claim 8, Sun teaches the protocol handler interface defines classes to handle data delivery protocols (HTTP protocol, FILE protocol, Real-time Transport protocol, MediaBase protocol; page 5, section Push and Pull Data Sources).

14. As to claim 9, Sun teaches a multimedia framework API comprising a playback interface (The JMF API consists mainly of interfaces; page 3, section Managers and a player; pages 1-2 and page 11, section Players) consisting of a manager API (The JMF API consists mainly of interface ... manager; page 3, section Managers), a package manager API (PackageManager; page 3, section Managers), a player API (Player; page 11, section Players and Fig. 2-11), a time API (Time; fig. 2-3 and page 2, section Time Model), a time base API (TimeBase; Fig. 2-11 and page 2, section Time Model), a system time base API (clock; fig. 2-3 and page 2, section Time Model), and a media locator API (MediaHandler; Fig. 2-11), and an event listener interface (listener interface; page 4, section Event Model). Although Sun does not explicitly teach a protocol handler interface, Sun teaches there are multiple protocols (HTTP protocol, FILE protocol, Real-time Transport protocol, MediaBase protocol; page 5, section Push and Pull Data Sources are supported by the framework, and the framework comprising a set of interfaces (The JMF API consists mainly of interfaces; page 3, section Managers). It would have been obvious a protocol handler interface is existed in the framework.

15. However, Sun does not teach the multimedia framework application program interface capable of operation in mobile hardware devices, and the memory size of the mobile multimedia framework API is less than 100 kilobytes. Mathur teaches a modified operating system is created

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to be used in an embedded systems with limited constrain memory (the kernel module 214 ... 4GB address space; page 4, paragraphs 62-63), wherein a modified API for the modified operating system is also created which included only a selected set of API that is needed for certain environment (page 2, paragraphs 15-18 and APIs in a Resource Limited System; page 6, paragraphs 102-103). Although both Sun and Mathur does not teach the framework API is less than 100 kilobytes, providing small API for the small operating system is well known and applied in the art. For example, Friedrich teaches operating system for embedded system is range from 20-26 kbytes (page 36).

16. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Sun and Keeley because the system of Mathur to provides method to reduce the size of the software/framework to work in a constraint memory systems.

17. As to claim 10, see rejection of claim 8 above.

18. As to claim 11, Sun teaches the multimedia framework API further comprising a control interface (the controls interface; page 7, section Controls).

19. As to claim 12, see rejection of claim 4 above.

20. As to claim 13, although Sun does not explicitly teach an error list interface, Sun teaches there is multiple error types are supported by the framework (NotRealizedError,

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NotPrefetchedError, NotConfiguredError; page 18). Sun further teaches the framework comprising a set of interfaces (The JMF API consists mainly of interfaces; page 3). It would have been obvious an error list interface is existed in the framework.

21. As to claim 14, see rejection of claim 6 above.

22. As to claim 15, although Sun does not explicitly teach an exception interface, Sun teaches there is multiple exception types are supported by the framework (ClockStoppedException; page 18). Sun further teaches the framework comprising a set of interfaces (The JMF API consists mainly of interfaces; page 3). It would have been obvious an exception interface is existed in the framework.

23. As to claim 16, see rejection of claim 7 above.

24. As to claim 17, see rejection of claims 9 and 10 above.

25. As to claims 18-19, see rejections of claims 15-16 above.

Response to Arguments

26. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K. Cao whose telephone number is (571) 272-3760. The examiner can normally be reached on Monday - Friday, 5:30AM - 2:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist at 571-272-2100.

Diem Cao


SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100